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10/583,096

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Sergej Lopatin

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ALEXANDRIA, VA 22314-1176

EXAMINER

ROGERS, DAVID A

ART UNIT

PAPER NUMBER

2856

MAIL DATE

DELIVERY MODE

02/09/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/583,096 | Applicant(s) LOPATIN ET AL. | |
| | Examiner DAVID A. ROGERS | Art Unit 2856 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-20 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 June 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/16/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. The restriction requirement between Groups I, II, and II, as set forth in the Office action mailed on 25 September 2008, has been reconsidered in view of the allowability of claims to the elected invention pursuant to MPEP § 821.04(a). The restriction requirement is hereby withdrawn as to any claim that requires all the limitations of an allowable claim.

In view of the above noted withdrawal of the restriction requirement, applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Specification

2. The disclosure is objected to because of the following informalities.

The abstract of the disclosure is objected to because the applicant's amendment requires --A-- at the being of the first sentence.

In the preliminary amendment filed 16 June 2006 the applicant amended the paragraph being on page 1 (line 16) to delete the word --assignee-- and replaced it with

Art Unit: 2856

--Endress + Hauser--. The applicant needs to delete the word --The-- that remains before the company's name.

Appropriate correction is required.

Drawings

3. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). See United States Patent 5,440,455 to Rottmar; United States Patents 5,709,558 and 6,051,783 to Dryer *et al.*, United States Patent 6,236,322 to Lopatin *et al.*, and United States Patent 6,389,891 to D'Angelico *et al.*

4. Corrected drawings in compliance with 37 C.F.R. 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 C.F.R. 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

5. Claims 11, 12, 15, and 18-20 are objected to because of the following informalities.

With regard to the aforementioned claims the term --mechanical oscillating unit-- is requested to be used in lieu of the applicant's term --mechanically oscillatable unit--. It is requested that this term be used throughout the claims and the written description.

With regard to claim 11 the written description makes it clear that the mechanical oscillating unit is oscillated using a driver/receiver unit. The “exciting” step is, therefore, unclear due to the presence of the optional phrase --or receive oscillations of the mechanical oscillatable unit with a driver/receiver unit--. The “detecting” step is too broad and not supported based on the written description as originally filed. In the written description the sole device used for detection is a force transmission unit and detection unit that are mechanically coupled to the securement. Any other means for detecting the forces or moments of the securement; e.g., optical/laser interferometry; are not taught or otherwise disclosed or suggested by the applicant.

With regard to claim 12 there is no step of manufacturing anything. The preamble of the claim is inconsistent with the limitations.

For the benefit of the applicant the following are suggested changes for the claims.

11. A method for manufacturing a measuring device for determining and/or monitoring a process variable of a medium in a container, the method comprising the steps of:

securing a mechanical oscillating ~~mechanically oscillatable~~ unit via a securement to a sensor housing and/or to the container; ~~and~~

exciting the mechanical oscillating ~~mechanically oscillatable~~ unit to oscillate, ~~or receive oscillations of the mechanically oscillatable unit with~~ using a driver/receiver unit;

detecting reaction forces and/or reaction moments which act on the securement due to the oscillations of the mechanical oscillating ~~mechanically oscillatable~~ unit using a force detection unit mechanically coupled to the securement;

issuing a report, when the reaction forces and/or reaction moments exceed predeterminable limit values; and

adjusting, when in the case of a report is issued, the mechanical oscillating ~~mechanically oscillatable~~ unit with regard to ~~as regards~~ its oscillation properties.

Art Unit: 2856

12. An apparatus for ~~testing manufacturing~~ a measuring device having a mechanical oscillating unit and a securement, the apparatus comprising:

at least one force detection unit; and

means for securing the measuring device ~~to and~~ said at least one force detection unit such that the force detection unit, which is mechanically coupled to with said securement in such a manner that it detects reaction forces and/or reaction moments from the mechanical oscillating unit, which act on said securement due to the oscillations of the mechanical oscillating ~~mechanically oscillatable~~ unit.

15. A measuring device for determining and/or monitoring a process variable of a medium in a container, comprising:

a mechanical oscillating ~~mechanically oscillatable~~ unit, which is secured via a securement to a sensor housing and/or to the container;

a driver/receiver unit, which excites said mechanical oscillating ~~mechanically oscillatable~~ unit to oscillate, ~~or receives oscillations of said mechanically oscillatable unit;~~
and

at least one force detection unit, ~~which is~~ mechanically coupled to with said securement in such a manner that it detects reaction forces and/or reaction moments, which act on said securement due to the oscillations of said mechanical oscillating ~~mechanically oscillatable~~ unit.

16. The measuring device as claimed in claim 15, wherein: said force detection unit is arranged in such a manner that it detects reaction forces and/or reaction moments along an axis essentially coinciding with an oscillation axis of said mechanical oscillating ~~mechanically oscillatable~~ unit.

18. The measuring device as claimed in claim 15, wherein: said mechanical oscillating ~~mechanically oscillatable~~ unit comprises an oscillatory fork.

19. The measuring device as claimed in claim 15, wherein: the mechanical oscillating ~~mechanically oscillatable~~ unit comprises a single-rod.

20. The measuring device as claimed in claim 19, wherein:

said mechanical oscillating ~~mechanically oscillatable~~ unit comprises a single-rod having three oscillatory members; and

at least one oscillatory member is connected at a connecting region with said securement.

Allowable Subject Matter

6. Claims 11-20 are allowed.
7. The following is a statement of reasons for the indication of allowable subject matter: The prior art teaches the measuring device have the oscillating members. The prior art does not teach mechanically coupling a force detecting system to a securement member to monitor the force/moments of the oscillator on the securement member.

Conclusion

8. This application is in condition for allowance except for the following formal matters noted above. Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 25 USPQ 74, 453 O.G. 213, (Comm'r Pat. 1935). A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID A. ROGERS whose telephone number is (571)272-2205. The examiner can normally be reached on Monday - Friday (0730 - 1600). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E. Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2856

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David A. Rogers/
Primary Examiner, Art Unit 2856